

What is claimed is:

1. A method of making a lithographic printing plate from a heat-sensitive pre-sensitized plate of a positive-working mode for lithographic printing comprising the steps of:
  - 5 exposing the heat-sensitive pre-sensitized plate to light, and  
developing the plate using an alkaline developing solution comprising  
(a) at least one surfactant selected from the group consisting of anionic  
surfactants and ampholytic surfactants, and (b) at least one salt selected  
from the group consisting of alkali metal salts and salts of an ammonium  
10 cation, wherein the pre-sensitized plate comprises a substrate, a lower layer  
which comprises a water-insoluble and alkali-soluble resin, and an upper  
heat-sensitive layer which comprises a water-insoluble and alkali-soluble  
resin and an infrared absorption dye and exhibits an elevated solubility with  
respect to alkaline aqueous solutions when heated, said lower layer and said  
15 upper heat-sensitive layer being located on the substrate in this order.
2. The method of claim 1 wherein the amount of (a) at least one  
surfactant selected from the group consisting of anionic surfactants and  
ampholytic surfactants in the developing solution is in the range of 0.001 to  
20 10% by weight.
3. The method of claim 2 wherein the amount of (a) at least one  
surfactant selected from the group consisting of anionic surfactants and  
ampholytic surfactants in the developing solution is in the range of 0.005 to  
25 1% by weight.
4. The method of claim 3 wherein the amount of (a) at least one  
surfactant selected from the group consisting of anionic surfactants and

ampholytic surfactants in the developing solution is in the range of 0.01 to 0.5% by weight.

5. The method of claim 1 wherein the amount of (b) at least one salt  
5 selected from the group consisting of alkali metal salts and salts of an ammonium cation in the developing solution is in the range of 0.01 to 1 mol/liter in terms of the alkali metal and/or ammonium cation.

6. The method of claim 5 wherein the amount of (b) at least one salt  
10 selected from the group consisting of alkali metal salts and salts of an ammonium cation in the developing solution is in the range of 0.05 to 0.5 mol/liter in terms of the alkali metal and/or ammonium cation.

7. The method of claim 1 wherein the ratio of the amount of (a) at least  
15 one selected from an anionic surfactant and an ampholytic surfactant in terms of A (gram/liter) to the amount of (b) at least one selected from an alkali metal and an ammonium cation in terms of B (mol/liter) in the developing solution: A/B is in the range of from 0.01 to 100.

20 8. The method of claim 7 wherein the A/B is in the range of from 0.1 to 50.

9. The method of claim 1 wherein (b) at least one salt selected from the  
group consisting of alkali metal salts and salts of an ammonium cation is  
25 selected from halide, sulfate, nitrate, phosphate, carbonate, borate, formate, acetate, propionate, maleate, lactate, levulinate, malonate, adipate, fumarate, citrate, and malate.

10. The method of claim 9 wherein (b) at least one salt selected from the group consisting of alkali metal salts and salts of an ammonium cation salt is selected from chloride salt, nitrate, sulfate, phosphate, carbonate, borate, acetate and citrate.

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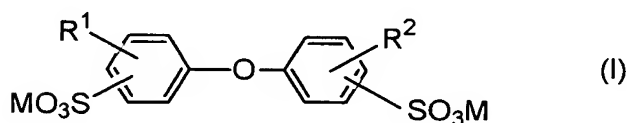
11. The method of claim 1 wherein the anionic surfactant is selected from fatty acid salts, abietates, hydroxyalkanesulfonates, alkanesulfonates, alkyl diphenyl ether sulfonates, diphenyl ether disulfonates, dialkylsulfosuccinate ester salts, linear alkylbenzenesulfonates, branched  
10 alkylbenzenesulfonates, alkyl naphthalenesulfonates, alkylphenoxy polyoxyethylenepropylsulfonates, polyoxyethylene alkylsulfophenyl ether salts, sodium salts of N-methyl-N-oleytaurine, disodium salts of N-alkylsulfosuccinic monoamide, petroleum sulfonates, sulfated tallow oil, sulfates of fatty acid alkyl esters, alkyl sulfates, polyoxyethylene alkyl ether  
15 sulfates, fatty acid monoglyceride sulfates, polyoxyethylene alkylphenyl ether sulfates, polyoxyethylene styrylphenyl ether sulfates, alkyl phosphates, polyoxyethylene alkyl ether phosphates, polyoxyethylene alkylphenyl ether phosphates, partially saponified styrene - maleic anhydride copolymers, partially saponified olefin - maleic anhydride copolymers; and condensates of  
20 naphthalenesulfonate and formalin.

12. The method of claim 1 wherein the anionic surfactant is selected from carboxylic acid type surfactants and sulfonic acid type surfactants.

25 13. The method of claim 12 wherein the anionic surfactant is selected from fatty acid salts, abietates, hydroxyalkanesulfonates, alkanesulfonates, alkyl diphenyl ether sulfonates, diphenyl ether disulfonates, dialkylsulfosuccinate ester salts, olefin sulfonates, linear

alkylbenzenesulfonates, branched alkylbenzenesulfonates, alkylnaphthalenesulfonates, alkylphenoxy polyoxyethylene propylsulfonates, polyoxyethylene alkylsulfophenyl ether salts, disodium salts of N-alkylsulfosuccinic monoamide, petroleum sulfonates, and condensates of naphthalenesulfonate and formalin.

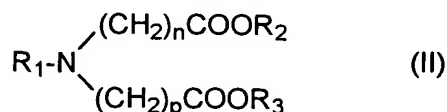
14. The method of claim 13, the anionic surfactant is selected from diphenyl ether disulfonate salts represented by the following formula (I):



wherein  $\text{R}^1$  and  $\text{R}^2$  each represents a hydrogen atom or a linear or branched alkyl group, and M represents a monovalent alkali metal.

15. The method of claim 1 wherein the ampholytic surfactant is selected from amino acid type-ampholytic surfactants and betaine type-ampholytic surfactants.

16. The method of claim 1 wherein the ampholytic surfactant is selected from alkylamino dicarboxylic acids and salts thereof represented by the following formula (II):



wherein  $\text{R}_1$  represents an alkyl group having 4 to 30 carbon atoms,  $\text{R}_2$  and  $\text{R}_3$  each represents a hydrogen atom or a monovalent alkali metal, and n and p

each represents an integer from 1 to 10.